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UTILITY APPLICATION

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**CARTILAGE REPAIR IMPLANT WITH SOFT BEARING SURFACE
AND FLEXIBLE ANCHORING DEVICE**

ABSTRACT OF THE DISCLOSURE

A non-resorbable implant for repairing or replacing damaged or diseased cartilage in a mammalian joint (such as a knee) is disclosed. This implant uses a relatively soft and bendable "bearing surface", which is bonded or otherwise coupled (preferably through one or more intermediate layers that provide greater strength) to a flexible anchoring grid. All components which make up the implant should be flexible, so that the implant can be rolled up and surgically inserted into a joint using a minimally invasive incision, preferably by arthroscopic means. In one embodiment, an anchoring grid is implanted first and secured to a prepared bone surface, using pins, cement, or other suitable means. The component with the bearing surface is then "unrolled" by the surgeon across a relatively small area of bone condyle that has been denuded of its cartilage cover. In this embodiment, which is likely to be well-suited for treating relatively small cartilage defects, such as in "grade 4" chondromalacia, the implant can be "tacked down" by the surgeon as it is unrolled, to attach it to the bone in various spaced locations around the periphery and interior of the implant. In an alternate embodiment which may be better suited for repairing larger cartilage defects, a flexible anchoring component is inserted first, and anchored to the bone; then, a bearing surface component is inserted and coupled to the already-installed anchoring component.

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